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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Lisa Sura, Daniel S. Carr
Assignee: Dell Products L.P.
Title: System and Method for an Information Handling System Housing Lid Release
Serial No.: 10/824,788 Filing Date: April 15, 2004
Examiner: Corey M. Broussard Group Art Unit: 2835
Docket No.: DC-06102 Customer No.: 33438

Austin, Texas
July 28, 2005

Mail Stop Appeal Brief - Patents
Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 CFR § 41.37

Dear Sir:

Applicant submits this Appeal Brief pursuant to the Notice of Appeal filed in this case on June 23, 2005. A check is enclosed which includes the \$500.00 fee for this Appeal Brief. The Board is also authorized to deduct any other amounts required for this appeal brief and to credit any amounts overpaid to Deposit Account. No. 502264.

I. REAL PARTY IN INTEREST - 37 CFR § 41.37(c)(1)(i)

The real party in interest is the assignee, Dell Products L.P., as named in the caption above and as evidenced by the assignment set forth at Reel 015224, Frame 0361.

II. RELATED APPEALS AND INTERFERENCES - 37 CFR § 41.37(c)(1)(ii)

Based on information and belief, there are no appeals or interferences that could directly affect or be directly affected by or have a bearing on the decision by the Board of Patent Appeals and Interferences in the pending appeal.

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III. STATUS OF CLAIMS - 37 CFR § 41.37(c)(1)(iii)

Claims 1-5 and 7-20 are pending in the application. Claim 1 stands rejected under 35 U.S.C. § 102 as anticipated by U.S. Patent Publication No. 2003/0081399 (Davis). Claims 15-20 stand rejected under 35 U.S.C. § 102 as anticipated by U.S. Patent No. 4,501,460 issued to Sisler. Claims 2-5 and 7-14 stand rejected under 35 U.S.C. § 103 over Davis in view of Sisler. The rejection of claims 1 - 20 is appealed. Appendix "A" contains the full set of pending claims.

IV. STATUS OF AMENDMENTS - 37 CFR § 41.37(c)(1)(iv)

No amendments after final have been requested or entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER - 37 CFR § 41.37(c)(1)(v)

Information handling system housings typically hold processing components in a small area (2:16) that is accessible through a detachable lid constructed from thin sheet metal (2:7-13). The small size of the housing and minimal thickness of the lid tend to make removing the lid an awkward operation, especially when the removal operation requires two hands (2:14-29). To simplify removal of a lid from a housing, an actuator accessible to the housing exterior supports one-handed lid removal by disengaging a latch catch from a latch to release the lid with initial actuator movement and, with subsequent actuator movement, by providing a lid removing force "sliding the lid relative to the housing to release couplings from coupling points" (5:31-6:2; Claim 1). A cam actuator provides release of the lid from the housing with a latch push that moves a latch from a closed position to an open position followed by a removing force provided with an inclined surface that disengages couplings that are "separate from the latch" (6:3-14; Claim 8). Claim 15 recites a method that removes a lid with "initial" cam actuator movement moving a latch and "subsequent" cam actuator movement "to slide the lid relative to the housing."

VI. GROUND S OF REJECTION TO BE REVIEWED ON APPEAL - 37 CFR § 41.37(c)(1)(vi)

Does Davis disclose the “actuator” recited by Claim 1, the actuator providing a lid removing force “sliding the lid relative to the housing to release the couplings form the coupling points”?

Does Sisler disclose the step recited by Claim 15 of “pushing by subsequent cam actuator movement an inclined surface against the lid to slide the lid relative to the housing”?

Does a motivation exist to combine Davis and Sisler under Section 103 to support the rejection of Claims 2-5 and 7-14?

VII. ARGUMENT - 37 CFR § 41.37(c)(1)(vii)

The cam actuator of the present invention allows a one-handed operation to release a lid from a housing by unlatching the lid with initial actuator movement and sliding the lid with subsequent actuator movement to release couplings from coupling points.

Davis discloses an information handling system having a hinged lid released to rotate to an open position by activation of a latch.

Sisler discloses a modular housing to connect information handling system housings together.

Claim 1 stands rejected as anticipated by Davis. Claim 1 as amended recites, in part, “an actuator coupled to the housing and accessible to the housing exterior, the actuator aligned to disengage the latch catch from the latch and to provide a lid removing force to the lid removal protrusion, the lid removing force sliding the lid relative to the housing to release the couplings from the coupling points”. Davis cannot anticipate Claim 1 because Davis fails to teach, disclose or suggest an actuator that slides the lid relative to the housing to release the couplings from the coupling points. Davis discloses an actuator that releases a lid from a housing, however, the lid of Davis rotates about coupling points that remain coupled upon complete activation of the actuator. The Examiner acknowledges that Davis fails to release its hinged couplings with activation of the actuator (Office Action dated June 8, 2005) but nonetheless maintains the

rejection stating that “additional steps to remove the coupling from the coupling points” do not prohibit anticipation of Claim 1. The Examiner misapplies the law. In order to anticipate Claim 1, the Examiner must establish that the actuator of Davis slides the lid and releases the couplings from the coupling points. Since the actuator of Davis does neither of these, Claim 1 is allowable, as are Claims 2-5 and 7, and the Board should reverse the Examiner.

Claim 15 stands rejected as anticipated by Sisler. Claim 15 as amended recites, in part, “pushing by subsequent cam actuator movement an inclined surface against the lid to slide the lid relative to the housing”. Sisler cannot anticipate Claim 15 because Sisler fails to teach, disclose or suggest an actuator acting “to slide the lid relative to the housing.” First, Sisler addresses attachment and release of modular housings, not a lid to a housing as is recited by Claim 15. Second, Sisler does not slide modular housings relative to each other. The Examiner admits “Sisler does teach away from sideways forces” but maintains the rejection because Sisler “doesn’t teach away from any sliding engagement” (Office Action dated June 8, 2005). Claim 15 does not recite engagement of a lid, Claim 15 recites removing of a lid by sliding the lid relative to the housing. Sisler uses a moving latch bar to engage hooks. The latch bar and hooks of Sisler are hidden between modular housings; neither anticipates the lid recited by Claim 15. Accordingly no basis exists for the Examiner’s rejection of Claim 15 as anticipated by Sisler and the Board should reverse the Examiner by finding Claims 15-20 allowable.

Claims 2-5 and 7-14, including Claim 8, stand rejected as obvious over Davis view of Sisler. Applicants respectfully submit that no motivation exists to combine Davis, which relates to a housing and a lid, with Sisler, which relates to modular housings. Indeed, Sisler teaches away from such a combination because Sisler teaches away from sliding modular housings relative to each other “to minimize sideways forces on the pins in the connector” (Abstract). Further, as pointed out by the Examiner in the Office Action dated June 8, 2005, the latch bar and hooks of Sisler are used to engage modular housings together by pulling electrical connectors together without a “disengaging effect” (4:46). Since no motivation exists to combine Davis and Sisler, the rejection of Claims 2-5 and 7-14 is improper and should be reversed by the Board.

VIII. CLAIMS APPENDIX - 37 CFR § 41.37(c)(1)(viii)

A copy of the pending claims involved in the appeal is attached as Appendix A.

IX. EVIDENCE APPENDIX - 37 CFR § 41.37(c)(1)(ix)


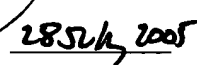
No evidence appendix is filed.

X. RELATED PROCEEDINGS APPENDIX - 37 CFR § 41.37(c)(1)(x)

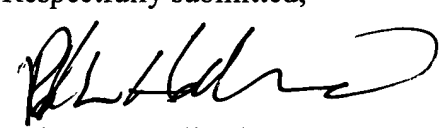
There are no related proceedings.

XI. CONCLUSION

For the reasons set forth above, Applicants respectfully submit that Claims 1-5 and 7-20 are fully allowable. Accordingly, Applicants respectfully submit that rejection of pending Claims 1-5 and 7-20 is unfounded, and request that the rejection of Claims 1-5 and 7-20 be reversed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Appeal Brief – Patents, Board of Patent Appeals and Interferences, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on July 28, 2005.	
 Attorney for Applicant	 Date of Signature

Respectfully submitted,


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APPENDIX A

1. An information handling system comprising:
a housing having an interior, an exterior, an opening and one or more coupling points;
plural processing components disposed in the housing and operable to process
information;
a lid sized to cover the opening, the lid having a latch catch, couplings aligned to engage
the coupling points, and a lid removal protrusion extending into the housing;
a latch coupled to the housing and aligned to engage the latch catch to secure the lid to
the housing; and
an actuator coupled to the housing and accessible to the housing exterior, the actuator
aligned to disengage the latch catch from the latch and to provide a lid removing
force to the lid removal protrusion, the lid removing force sliding the lid relative
to the housing to release the couplings from the coupling points.
2. The information handling system of Claim 1 wherein the actuator comprises a
cam rotationally coupled to the housing, the cam having a latch push operable to push the latch
to a disengaged position upon initiation of rotation and an inclined surface operable to push the
lid from the housing.
3. The information handling system of Claim 2 wherein the lid couplings comprise
hooks and the housing coupling points comprise slots, the hooks operable to engage the slots by
sliding the lid relative to the housing, the latch securing the lid to the housing by engaging the
latch catch to prevent sliding of the lid relative to the housing.
4. The information handling system of Claim 3 wherein the cam surface inclines so
that rotation of the cam slides the lid relative to the housing to release the hooks from
engagement with the slots.
5. The information handling system of Claim 4 wherein the hooks release from the
slots with approximately ninety degrees rotation of the cam.

7. The information handling system of Claim 6 further comprising a spring coupled to the housing and the latch, the spring operable to bias the latch to engage the latch catch.

8. A system for removing an information handling system lid from a secured position on an information handling system housing to an unsecured position, the system comprising:

a latch operable to couple to the housing and movable between a closed position that engages a latch catch of the lid to secure the lid to the housing and an open position that disengages the latch catch of the lid to release the lid to move relative to the housing; and

an actuator operable to move from a lid-secured position to a lid-unsecured position, the actuator having first and second surfaces, the first surface aligned to move the latch from the closed position to the open position upon initial movement of the actuator from the lid-secured to the lid unsecured position, the second surface aligned to push the lid from the secured position upon subsequent movement of the actuator to the lid-unsecured position;

wherein the second surface pushes the lid a predetermined distance to disengage couplings that secure the lid to the housing, the couplings separate from the latch.

9. The system of Claim 8 wherein the latch comprises a blocking surface operable to selectively block sliding movement of a post extending from the lid.

10. The system of Claim 9 wherein the blocking surface has an opposing surface having an incline operable to translate a sliding force applied by the post to move the latch to an open position to insert the post in the latch.

11. The system of Claim 8 wherein:
the actuator is further operable to rotationally couple to the housing and rotate from a closed position to an open position;
the first surface comprises a latch push disposed to push the latch to an open position upon initiation of rotation and hold the latch in the open position as rotation continues; and

the second surface comprises a cam disposed to engage the lid after initiation of rotation,
the cam pushing the lid an increasing distance as the rotation continues.

12. The system of Claim 11 further comprising:
a post extending from the lid aligned to engage the cam;
wherein the couplings comprise:
hooks extending from the lid; and
coupling points formed in the housing, the coupling points aligned to accept the
hooks in a sliding engagement.

13. The system of Claim 11 further comprising one or more springs disposed to bias
the actuator to a lid-secured position.

14. The system of Claim 13 further comprising one or more springs disposed to bias
the latch to a closed position.

15. A method for removing an information handling system lid from an associated
housing, the method comprising:
moving a cam actuator from a secured position to an unsecured position;
contacting with initial cam actuator movement a cam outer surface with a latch to move
the latch from a position securing the lid to the housing;
pushing by subsequent cam actuator movement an inclined surface against the lid to slide
the lid relative to the housing.

16. The method of Claim 15 wherein moving a cam actuator further comprises
rotating a handle external to the housing that translates rotational force internal to the housing to
release and move the lid.

17. The method of Claim 16 wherein contacting with initial cam actuator movement
further comprises:
rotating a cylinder from a closed position aligning a missing portion of the cylinder with
a latch to an open position aligning the cylinder with the latch to push the latch

and frees a lid post from a latch catch; and
maintaining the latch in the open position against the cylinder as the cylinder rotates.

18. The method of Claim 17 wherein pushing by subsequent cam actuator movement further comprises pushing the lid post out of the latch catch.

19. The method of Claim 16 wherein pushing by subsequent cam actuator movement further comprises:

engaging an inclined cam surface with the lid; and
pushing the lid an increasing distance as the inclined cam surface rotates.

20. The method of Claim 19 wherein pushing the lid further comprises moving the lid enough distance to free lid hooks from housing slots.